UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,8,10-17 and 19-29* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,8,10-17,19-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communication filed 10/17/06.

2.   Claims 1-5, 7, 8, 10-17 and 19-29 are pending in the application.

Specification

3.   The continuation data of the application No. 09/477,738 needs to be updated with

the current status.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-5, 7-8, 10, 14-17, 19-21, 25 and 26 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Chang et al (Animation: From Cartoons to the User

Interface) in view of Elliott et al. (5,764,241).

Claim 1, Chang teaches a method for moving an object in a graphical user

interface, comprising the steps of a) determining a path of movement for the object

along at least one axis, and a period of time for the movement along said path (Fig. 8:

starting and ending positions; fig.9); b) establishing a non-constant velocity function

along said axis for said period of time (page 51: slow-in and slow-out movement with

faster movement in the middle; c) calculating an instantaneous position for the object

along said path in accordance with said function and the relationship of a current time

value to said period of time (fig. 8 and fig. 9); d) displaying said object at said calculated

position (fig. 8 and fig. 9); and e) iteratively repeating steps (c) and (d) during said

period of time (fig. 8 and fig. 9). However, Chang et al does not specifically teach

determining a period of time for the movement along the path. This is disclosed in Elliot

et al (a periodic function of time. It begins at local time zero as the value zero and then

varies, and time scaled to change its duration in animation effect like slow-in and slow-

out; the data flow graph or a continuous data flow, the sine function, the sinusoidal

velocity; col. 11, lines 13-65 and all these features related to a period of time for the

movement along the path non-constant velocity function such as slow-in and slow-out

along the axis for the period of time). It would have been obvious to one of ordinary skill

in the art at the time the invention was made to incorporate a periodic function of time

taught by Elliott into the method of applying animation to the user interface of Chang for

moving objects from one location to another, because it would allow a user to describe

behavior that varies in response to discrete events. This feature allows events such as

state changes and mouse clicks to be integrated with time-varying values (col. 12, lines

2-9).

Claim 2, Chang teaches a non-linear function for velocity (fig. 8; fig. 9; page 51:

slow-in slow-out).

Claim 3, Elliott et al. teaches the function being a sinusoidal function (col. 11,

lines 33-55). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate a sine function taught by Elliott into the method of

applying animation to the user interface of Chang for moving objects from one location

to another, because it would create a periodic function of time and also provide more sophisticated model.

Claim 4, Elliott et al. teaches determining the amount of time that has elapsed since the beginning of said period of time, and determining the instantaneous position of the object along said path, calculating the ratio of said elapsed amount of time to the total duration of said period of time, applying said ratio to said function to determine a translation factor; and using the translation factor to determine the instantaneous position of the object along the path (col. 11, lines 23-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a periodic function of time taught by Elliott into the method of applying animation to the user interface of Chang for moving objects from one location to another, because it would allow a user to describe behavior that varies in response to discrete events. This feature allows events such as state changes and mouse clicks to be integrated with time-varying values (col. 12, lines 2-9).

Claim 5, Chang teaches a method for moving an object in a graphical user interface, comprising the steps of identifying a starting location for the object; selecting a final location for the object (fig.8: beginning and final pose; fig.9); displaying said object at sequential positions along a path from said starting location to said final location at increments of time (fig.8; fig.9), such that the distance between successive positions varies so that the object appears to be moving at a changing velocity (fig.8, fig. 9). Chang does not clearly teach a changing velocity; however, Elliott et al teaches a change in the data flow graph, a sinusoidal velocity (a changing velocity) varies over

time (col. 11, lines 35-55). It would have been obvious to one of ordinary skill in the art

at the time the invention was made to incorporate a periodic function of time taught by

Elliott into the method of applying animation to the user interface of Chang for moving

objects from one location to another, because it would allow a user to describe behavior

that varies in response to discrete events. This feature allows events such as state

changes and mouse clicks to be integrated with time-varying values (col. 12, lines 2-9).

Claim 7 is similar to claims 3, and hence are rejected with the same rationale.

Claims 8, 10 are similar to claims 5,7, and hence are rejected with the same

rationale.

Claim 20 is a user interface claim for a combination of claims 1 and 2, and hence

is rejected with the same rationale as claims 1 and 2.

Claim 21 is a user interface claim for claim 3, and hence is rejected with the

same rationale.

Claims 14-16, 17, 19, and 25-26 are program medium and system claims for the

method claims of 1-3, and 5, 7 respectively, and hence are rejected with the same

rationale, as it would have been obvious to have a storage medium to store the program

of the method, and a system to execute such programs.

6.   Claims 11, 22, and 27 are rejected under 35 U.S.C.103(a) as being unpatentable

over Chang et al (Animation: From Cartoons to the User Interface: 19932 ACM 0-

89791-628+93/0011), as applied to claims 8, 20, and 25 respectively in view of Elliott et

al, and further in view of IBM TDB article ("Window Closing Animations": IBM Technical

Disclosure Bulletin, US, IBM Corp, NY; 1 Nov. 1995., ISSN 0018-8689).

Claim 11, IBM TDB article teaches user action of minimizing a window, and animations for minimizing a window. Hence, it would have been obvious to one of ordinal skill in the art at the time the invention was made to incorporate the animation for minimizing the window in the invention of Chang and Elliott, in order to provide effective feedback on user action.

Claims 22 and 27 are similar to claim 11, and hence are rejected with the same rationale.

7.   Claims 12, 13, 23, 24, 28, and 29 are rejected under 35 U.S.C.103(a) as being unpatentable over Chang et al (Animation : From Cartoons to the User Interface : 1993: ACM 0-89791-628-93/0011), as applied to claims 8, 20, and 25 respectively in view of Elliott et al, and further in view of Ellison- Taylor (US 5,796,402).

Claims 12 and 13, Ellison-Taylor teaches a tiling program that aligns the windows based on the relative position and size of the windows when the request is made (col. 3: lines 27-48), thus teaching implicitly the moving of objects in a series toward the space occupied by the removed object when an object is removed, and away from the inserted object when an object is inserted. It would have been obvious to one of ordinary skill In the art at the time the invention was made to incorporate the tiling of Ellison-Taylor in the invention of Chang and Elliott, so that the objects may be displayed in their final positions without overlap, so that all the objects in the display area are visible to the user concurrently.

Claims 23-24, and 28-29 are similar to claims 12-13, and hence are rejected with the same rationale.

Response to Arguments

8.   Applicant's arguments filed 10/17/06 have been fully considered but they are not

persuasive because in claim 1, Chang teaches the path movement for the object at

least one axis; fig. 8 shows that: "slowly move out of beginning pose; during the middle

part of the movement and slowly move into final pose": this feature implicit teaches a

period of time for the movement along the path using animation effects like slow-in and

slow-out; Elliott specific teaches an animation effect like slow-in and slow-out is

expressed as a periodic function of time. It begins at a local time zero and then varies in

response to discrete events; the sin function is applied to time to create a periodic

function (see col. 11, line 13 through col. 12, line 9).

        THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

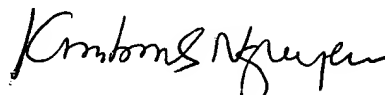than SIX MONTHS from the mailing date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached at (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 19, 2006

KIMBINH T. NGUYEN
PRIMARY EXAMINER